

## Special Issue

# Data-Driven Biomedical Research and Applications

### Message from the Guest Editor

In the last decade, biomedical scientists gained more knowledge of physiopathological mechanisms thanks to two key factors: the advent of high-throughput technologies and the introduction of high-performance computing into routine research activities. The former led to the capability to analyze at the genomic and proteomic level a multitude of organisms, from bacteria to human beings. The second led to the possibility of modeling systems to discover unknown patterns of interactions and introduced artificial intelligence tools and techniques in the laboratory and clinical research. To exploit the huge amount of data routinely collected in these settings, the scientific community is called to action. Indeed, in this landscape, development of new data management and analysis methods and of new translational and clinical applications is required in order to build reliable biomedical models and to obtain more efficacy in personalized medical therapies. **Keywords:** biostatistics  
causal inference  
predictive analytics  
clinical models  
bioinformatics  
personalized medicine  
epidemiology

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### Guest Editor

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### Deadline for manuscript submissions

closed (20 January 2022)



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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